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REMARKS

Claim 1 has been amended to state explicitly that the forwarding rule is selected also based on over which incoming service realm the packets arrived. Support for this limitation is found for example at page 31 lines 14 to 20.

Claim 8 has been amended to make the plurality of distinct and isolated user networks an element implicit to the multiple service interfaces rather than an explicit element. Claim 8 has also been amended to recite explicitly that the multiple forwarding rules are particular to their respective service interfaces, which limitation was found in previous claim 8 ("calculating multiple forwarding rules relating to instances of services").

Claims 1-8 and 11-21 remain for examination. No new subject matter has been added.

The Examiner has rejected claims 1-8 and 11-21 under 35 U.S.C. 103(a) as being obvious having regard to U.S. Patent 6,085,238 issued to Yuasa in view of U.S. Patent 5,825,772 issued to Dobbins and in view of U.S. Patent 5,845,091 issued to Dunne.

As a preliminary matter, the Examiner seems to have maintained portions of the previous objection in the present objection, even though such portions are no longer relevant. For example, starting at page 3 line 20, the Office Action states that "Dobbins discloses the system with multiple access rules based on topology and policing information relevant to each of said distinct and isolated user network", despite the fact that the Applicant has previously argued that the access rules of Dobbins cannot be equated with the forwarding rules of the present application. The Office Action then goes on to state (starting at page 4 line 9) that "Yuasa and Dobbins fail to disclose forwarding rules based on the routing topology and policing information relevant to each of said distinct and isolated network". If the Examiner is continuing to equate the access rules of Dobbin with the forwarding rules of the present application, then these two statements are contradictory. If the Examiner is no longer equating the access rules of Dobbin with the forwarding rules of the present application, then the first statement is irrelevant. Furthermore, the Examiner

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has not addressed the elements of claim 8, but rather appears to have rejected claim 8 on the basis of the elements of claim 1.

Both of these make it difficult for the Applicant to properly respond to the Examiner's rejection. If the Examiner issues another rejection based on 35 U.S.C. 103(a), the Examiner is kindly requested to show where each element of each claim, separately, is specifically taught by cited references.

Claim 1 of the present application is directed to a method of forwarding packets in a communication system. The method includes maintaining multiple forwarding rules, the forwarding rules based on routing topology and policing information relevant to each of multiple distinct and isolated user networks. Packets are forwarded using forwarding rules specific to the particular distinct and isolated user network from which the packet arrives. This allows each distinct and isolated user network to use the same destination address as other distinct and isolated network, yet have packets listing that destination address be forwarded to destinations particular to that distinct and isolated network. For example, network A may use destination address aa.bb.cc.dd. Network B, which is distinct and isolated from network A, may also use destination address aa.bb.cc.dd. When packets from each network arrive over their respective service interfaces, a forwarding rule is selected based partly on the incoming service interface, which is tied to the realm A or B. The forwarding rule selected for packets from realm A may forward packets having aa.bb.cc.dd as their destination to address ee.ff.gg.hh. The forwarding rule selected for packets from realm B may forward packets having aa.bb.cc.dd as their destination to address ii.jj.kk.ll. In this way, realms are implemented and different realms may still use the same destination addresses for internal purposes.

In contrast, the multiple forwarding tables taught by Dunne are not relevant to "distinct and isolated" user networks, in that the different user networks may forward packets to the same destination. As explained at column 4 lines 27 to 32, the goal of the multiple forwarding rules of Dunne is to provide for multiple paths to a destination, possibly so as to allow a user to choose which of the multiple paths to choose. This is shown explicitly in Figure 12 and described from column 5 line 45 to column 6 line 5. The multiple forwarding rules allow packets from subnetwork A to be forwarded to network

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1206 via router 1221, and packets from subnetwork B to be forwarded to network 1206 via router 1222. Since packets from each subnetwork can be forwarded to the same destination network, the subnetworks are not "distinct and isolated" and the multiple forwarding rules of Dunne serve a completely different purpose than those of claim 1 of the present application. Furthermore, the multiple forwarding lists of Dunne are concerned with routing, i.e. selecting one of multiple routes to a destination, whereas claim 1 of the present application is concerned with forwarding, i.e. selecting the destination. These are separate concepts.

Claim 1 includes the step of maintaining multiple forwarding rules, said forwarding rules based on routing topology and policing information relevant to each of said distinct and isolated user networks. The Examiner appears to have equated this element with Figure 12, router 1210, 1220-1222, and column 2 lines 27-42 and column 3 line 1 to column 6 line 15 of Dunne. However, as explained above, Dunne is not teaching maintaining multiple forwarding rules which are based on routing topology and policing information relevant to each of multiple distinct and isolated user networks. It should be noted that this limitation was present in claim 1 even before amendment.
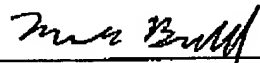
Claim 8 includes the limitation of multiple route servers for calculating multiple forwarding rules relating to instances of service to which service interfaces belong, the multiple forwarding rules being particular to their respective service interfaces. Claim 8 also includes edge forwarders for use these forwarding rules in order to direct service interfaces to user networks. The Examiner has not shown where the cited references teach separate route servers and edge forwarders, nor has the Examiner shown where the cited references teach the claimed functionality of such route servers, edge forwarders. Furthermore, the multiple forwarding rules being particular to their respective service interfaces, each of which provide instances of service to one of a plurality of distinct and isolated user networks, is not the same as the multiple forwarding rules taught by Dunne as explained above: Dunne does not teach distinct and isolated user networks, and Dunne teaches routing along different paths rather than forwarding rules.

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In addition, none of these elements are taught by Yuasa or Dobbins, as argued in response to previous Office Actions. The remaining claims are variously dependent on claims 1 and 8 and include the same limitations discussed above. As none of Yuasa, Dobbins, or Dunne teach every element of the claims of the present application, either separately or in combination, the Applicant respectfully submits that a *prima facie* case of obviousness has not been established against claims 1 to 8 and 11 to 21 of the present application.

In view of the foregoing, it is believed that the claims at present on file and as amended herein are in condition for allowance. Reconsideration and action to this end is respectfully requested.

Respectfully submitted,

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